

University of Alberta Library



0 1620 3503076 4

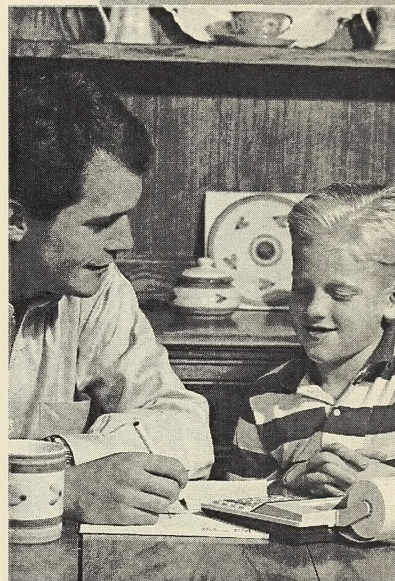
Mathematics

## Module 3

# Having Fun Adding and Subtracting



Home Instructor's Guide: Day 10–18  
and  
Assignment Booklet 3B



Learning  
Technologies  
Branch

Alberta  
LEARNING



Grade Two Mathematics  
Module 3: Having Fun Adding and Subtracting  
Home Instructor's Guide: Days 10–18 and Assignment Booklet 3B  
Learning Technologies Branch  
ISBN 0-7741-2025-8

Cover photo: PhotoDisc, Inc.

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	



You may find the following Internet sites useful:

- Alberta Learning, <http://www.learning.gov.ab.ca>
- Learning Technologies Branch, <http://www.learning.gov.ab.ca/lrb>
- Learning Resources Centre, <http://www.lrc.learning.gov.ab.ca>

The use of the Internet is optional. Exploring the electronic information superhighway can be educational and entertaining. However, be aware that these computer networks are not censored. Students may unintentionally or purposely find articles on the Internet that may be offensive or inappropriate. As well, the sources of information are not always cited and the content may not be accurate. Therefore, students may wish to confirm facts with a second source.

#### ALL RIGHTS RESERVED

Copyright © 2001, the Crown in Right of Alberta, as represented by the Minister of Learning, Alberta Learning, 11160 Jasper Avenue, Edmonton, Alberta T5K 0L2. All rights reserved. Additional copies may be obtained from the Learning Resources Centre.

No part of this courseware may be reproduced in any form, including photocopying (unless otherwise indicated), without the written permission of Alberta Learning.

Every effort has been made both to provide proper acknowledgement of the original source and to comply with copyright law. If cases are identified where this effort has been unsuccessful, please notify Alberta Learning so that appropriate corrective action can be taken.

**IT IS STRICTLY PROHIBITED TO COPY ANY PART OF THESE MATERIALS UNDER THE TERMS OF A LICENCE FROM A COLLECTIVE OR A LICENSING BODY.**

**Daily Summary****Day 10****Day 10: Lesson 1****Answers**

- |         |       |       |       |
|---------|-------|-------|-------|
| 1. a. 8 | f. 10 | k. 10 | p. 7  |
| b. 0    | g. 8  | l. 18 | q. 20 |
| c. 3    | h. 5  | m. 6  | r. 16 |
| d. 7    | i. 8  | n. 1  | s. 9  |
| e. 2    | j. 9  | o. 14 | t. 12 |

2. a.  $18 - 9 = 9$   
Jasper saved 9 cents.
- b.  $8 + 8 = 16$   
They have 16 marbles in all.
- c.  $14 - 7 = 7$   
Jasper now has seven hockey cards.

**Day 10: Lesson 2**

Show the student how to use a number line and a metre stick to help with addition and subtraction. For example, if the problem is  $5 + 2$ , point to 5 on the metre stick, count on 2 and you arrive at 7. So,  $5 + 2 = 7$ . This same principle applies to the number line.

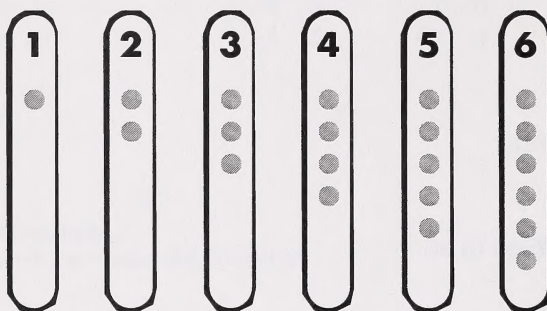
**Answers**

1.  $7 + 5 = 12$
2.  $12 + 6 = 18$
3. a. 19      d. 20  
b. 17      e. 19  
c. 15      f. 16

4. a. 6                      d. 3  
      b. 7                      e. 19  
      c. 2                      f. 17

### Day 10: Lesson 3

This lesson demonstrates how problems can be solved in a variety of ways. Have the student put dots on wooden craft sticks or tongue depressors with a felt pen. You will need 12 sticks. Have the student print the numerals 1 through 6 on two sets of sticks. Under the 1, the student will mark one dot, under the 2, two dots, and so on, up to six on both sides of sticks.



### Answers

1. The student should draw sticks with either of the following number of dots:
- 2 and 1
  - 3
2. a. 6                      c. 2 and 1  
      b. 2                      d. 4

### Day 10: Lesson 4

This lesson teaches how to add using ten, that is, increasing one addend while decreasing the other to make one of the addends ten for easier addition. Ensure the student comprehends this concept before continuing.

## Answers

- |                             |                             |                             |                             |
|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| 1. $9 + 7 = 16$<br>$10 + 6$ | 3. $5 + 9 = 14$<br>$10 + 4$ | 5. $9 + 2 = 11$<br>$10 + 1$ | 7. $9 + 8 = 17$<br>$10 + 7$ |
| 2. $8 + 3 = 11$<br>$10 + 1$ | 4. $6 + 9 = 15$<br>$10 + 5$ | 6. $8 + 7 = 15$<br>$10 + 5$ | 8. $8 + 5 = 13$<br>$10 + 3$ |

There are extension activities for Day 10. It is strongly recommended that the student work on these activities, as they are a review of strategies to use for adding.

## Day 11

## Day 11: Lesson 1

## Answers

- |         |       |       |
|---------|-------|-------|
| 1. a. 9 | h. 5  | o. 14 |
| b. 15   | i. 16 | p. 7  |
| c. 14   | j. 10 | q. 20 |
| d. 7    | k. 14 | r. 16 |
| e. 2    | l. 18 | s. 9  |
| f. 14   | m. 6  | t. 12 |
| g. 8    | n. 1  |       |
2. a.  $9 + 6 = 15$   
Su Ling climbed 15 steps in all.
- b.  $14 - 6 = 8$   
Marnie has 8 more dollars than her brother.
- c.  $7 + 9 = 16$   
Mabel now has 16 pencils.

## Day 11: Lesson 2

## Answers

1. a.  $13 - 4 = 9$   
b.  $19 - 12 = 7$

2. a. 9                      d. 13  
     b. 8                      e. 11  
     c. 17                     f. 3

3. a. 6                      d. 3  
     b. 7                      e. 7  
     c. 2                      f. 11

### Day 11: Lesson 3

#### Answers

1. 12  
 2. 6  
 3. 16  
 4. 9

### Day 11: Lesson 4

The student learns to subtract by counting on.

For example,  $8 - 5 = \boxed{\phantom{00}}$ .

The student will add on from the smaller digit, or 5. So, 5, . . . 6, 7, 8. Three were added on, so  $8 - 5 = 3$ . This is a valuable strategy to know when one of the addends is missing,

such as  $5 + \boxed{\phantom{00}} = 8$ , and in “How much more would I need” problems.

#### Answers

1. 1                      4. 3  
 2. 2                      5. 1  
 3. 3

There are extension activities for Day 11. It is strongly recommended that the student work on these activities, as they are a review of strategies to use for subtracting.

Have the student do the assignment for Day 11 after completing the day’s lessons.

## Day 12

## Day 12: Lesson 1

## Answers

- |         |       |       |
|---------|-------|-------|
| 1. a. 8 | h. 7  | o. 16 |
| b. 15   | i. 16 | p. 7  |
| c. 1    | j. 2  | q. 15 |
| d. 7    | k. 14 | r. 16 |
| e. 16   | l. 1  | s. 19 |
| f. 18   | m. 6  | t. 12 |
| g. 8    | n. 1  |       |

2. a.  $17 - 14 = 3$   
Ashley borrowed three more books than Shawn.
- b.  $16 - 9 = 7$   
Seven ponies did not have riders.
- c.  $18 - 7 = 11$   
Eleven cars left the parking lot.

## Day 12: Lesson 2

This lesson is a quick review of addition and subtraction facts and the strategies used to find the answers.

## Answers

- |          |       |      |
|----------|-------|------|
| 1. a. 11 | e. 3  | i. 9 |
| b. 5     | f. 14 | j. 2 |
| c. 5     | g. 2  | k. 3 |
| d. 10    | h. 8  | l. 6 |
2. a. 16      e. 20      i. 19  
b. 19      f. 13      j. 15  
c. 19      g. 17      k. 20  
d. 19      h. 12      l. 17

3. a. 16                      e. 9                      i. 14  
     b. 15                      f. 13                      j. 14  
     c. 6                        g. 2                      k. 8  
     d. 10                      h. 2                      l. 8

4. The student should have circled the following:

- $16 - 8$
- $18 - 10$
- $20 - 12$
- $17 - 9$
- $5 + 3$
- $8 - 0$

5. The student should have circled the following:

- $10 + 3$
- $6 + 7$
- $14 - 1$
- $20 - 7$
- $18 - 5$
- $13 + 0$
- $8 + 5$

6. The student should have circled the following:

- $9 + 7$
- $17 - 1$
- $11 + 5$
- $8 + 8$
- $10 + 6$

7. The student should have circled the following:

- $10 - 5$
- $13 - 8$
- $11 - 6$
- $5 - 0$
- $3 + 2$

## Day 12: Lesson 3

The student is introduced to two-digit addition. The student will need base ten rods and cubes and the Place-Value Mat in the Appendix. Have these ready before the lesson begins.

Explain to the student that a digit is a number from one to nine. A two-digit number has two numbers in it, for example, 23.

### Answers

1. 67
2. 79
3. 39
4. 59

**Day 12: Lesson 4****Answers**

1. a. 36                      c. 58  
   b. 88                      d. 67
2. a. 26  
   b. 79
3. a. 28                      e. 99                      i. 19                      m. 29  
   b. 68                      f. 75                      j. 99                      n. 84  
   c. 49                      g. 39                      k. 17                      o. 39  
   d. 57                      h. 37                      l. 69                      p. 48

**Day 13**

The student is introduced to two-digit subtraction in today's lessons.

**Day 13: Lesson 1****Answers**

1. a. 8                      d. 15                      g. 6                      j. 1                      m. 16                      p. 38                      s. 38  
   b. 19                      e. 99                      h. 7                      k. 7                      n. 19                      q. 2                      t. 18  
   c. 7                      f. 1                      i. 49                      l. 79                      o. 16                      r. 16
2. a.  $70 + 6 = 76$   
   Elena will have 76 stickers in all.
- b.  $70 + 9 = 79$   
   Laura has 79 stickers in all.
- c.  $36 + 3 = 39$   
   Jasper has 39 cans of food for the food bank.

**Day 13: Lesson 2****Answers**

1. 62
2. 77
3. 32
4. 53

**Day 13: Lesson 3****Answers**

1. a. 71                      c. 64  
   b. 13                      d. 40
2. a. 82                      b. 52
3. a. 30                      e. 87                      i. 15                      m. 32  
   b. 94                      f. 51                      j. 93                      n. 41  
   c. 83                      g. 45                      k. 12                      o. 62  
   d. 71                      h. 45                      l. 63                      p. 53

Have the student do the assignment for Day 13 after completing the day's lessons.

**Day 14**

The focus in Days 12 and 13 was on adding two-digit numbers and one-digit numbers and subtracting one-digit numbers from two-digit numbers. Today, the focus is on adding two-digit numbers to two-digit numbers and on subtracting two-digit numbers from two-digit numbers.

**Day 14: Lesson 1****Answers**

1. a. 9                      e. 13                      i. 16                      m. 7                      q. 69  
   b. 33                      f. 71                      j. 59                      n. 16                      r. 15  
   c. 39                      g. 7                      k. 72                      o. 6                      s. 68  
   d. 2                      h. 81                      l. 15                      p. 10                      t. 38

2. a.  $89 - 7 = 82$   
Elena has 82 cents left.
- b.  $65 - 4 = 61$   
Jasper has 61 marbles left.
- c.  $37 - 5 = 32$   
Elena sold 32 more chocolate bars than her friend.

**Day 14: Lesson 2****Answers**

1. a. 89                  c. 88  
   b. 86                  d. 79
2. a. 77  
   b. 79
3. a. 97                  b. 73

**Day 14: Lesson 3****Answers**

1. a. 13                  c. 13  
   b. 12                  d. 22
2. a. 30                  c. 38  
   b. 51
3. a. 22  
   b. 1
4. a. 89                  d. 89                  g. 96                  j. 69  
   b. 95                  e. 43                  h. 77                  k. 99  
   c. 79                  f. 87                  i. 98                  l. 66
5. a. 50                  d. 33                  g. 78                  j. 15  
   b. 43                  e. 11                  h. 11                  k. 20  
   c. 15                  f. 33                  i. 23                  l. 12

There are extension activities for Day 14. These activities are suitable for Days 14 to 18.

Have the student do the assignment for Day 14 after completing the day's lessons.

## Day 15

Today the student learns how to add with regrouping.

### Day 15: Lesson 1

#### Answers

1. a. 9            d. 11            g. 87            j. 14            m. 2            p. 12            s. 21  
       b. 10          e. 13            h. 8            k. 88          n. 10          q. 9            t. 79  
       c. 11          f. 12            i. 16            l. 26          o. 13          r. 11
2. a.  $87 - 46 = 41$   
       Jasper has 41 more gum balls than Mark.
- b.  $45 - 24 = 21$   
       Elena had 21 minutes left to play outside.
- c.  $52 + 43 = 95$   
       There were 95 cards in all.

### Day 15: Lesson 3

Help the student with the regrouping exercises. He or she should do the two activities just as shown in the example with the two buses. The student uses rods and cubes to regroup. Ensure the student understands how to regroup before continuing.

#### Answers

1. a. 2 tens 19 ones      regroup      3 tens 9 ones  
                                      $\rightarrow$
- b. 8 tens 15 ones      regroup      9 tens 5 ones  
                                      $\rightarrow$
- c. 6 tens 11 ones      regroup      7 tens 1 one  
                                      $\rightarrow$
- d. 5 tens 14 ones      regroup      6 tens 4 ones  
                                      $\rightarrow$

2. There were 62 children on the field trip.
3.  $37 + 56 = 93$   
There were 93 cars in the parking lot in all.

4. a. 90                      e. 64  
b. 71                      f. 94  
c. 53                      g. 90  
d. 71

5. a. 72  
b. 83  
c. 65

## Day 16

Today the student learns to trade a ten for ones when regrouping for subtraction. Ensure the student understands trading very well before proceeding.

### Day 16: Lesson 1

#### Answers

1. a. 30              d. 1              g. 9              j. 84              m. 2              p. 9              s. 13  
b. 11              e. 43              h. 16              k. 35              n. 11              q. 11              t. 62  
c. 22              f. 81              i. 16              l. 40              o. 12              r. 83
2. a.  $25 + 17 = 42$   
Elena bought 42 cookies.
- b.  $65 + 29 = 94$   
Jasper spent 94 cents in all.
- c.  $45 + 9 = 54$   
Jasper counted 54 bison.

### Day 16: Lesson 2

Help the student work through the problem. The answer is that  $37 - 29 = 8$ . There were 8 more fish in the lake last summer.

**Day 16: Lesson 3**

1.  $50 - 26 = 24$

2.  $90 - 73 = 17$

3. a. 4 tens 4 ones      regroup      3 tens 14 ones  
    $\rightarrow$

b. 2 tens 0 ones      regroup      1 tens 10 ones  
    $\rightarrow$

c. 6 tens 5 ones      regroup      5 tens 15 ones  
    $\rightarrow$

d. 8 tens 4 ones      regroup      7 tens 14 ones  
    $\rightarrow$

e. 3 tens 6 ones      regroup      2 tens 16 ones  
    $\rightarrow$

f. 7 tens 2 ones      regroup      6 tens 12 ones  
    $\rightarrow$

g. 9 tens 5 ones      regroup      8 tens 15 ones  
    $\rightarrow$

h. 5 tens 7 ones      regroup      4 tens 17 ones  
    $\rightarrow$

4. a. 49      c. 19  
b. 4      d. 3

5. a. 49      e. 7  
b. 9      f. 18  
c. 22      g. 57  
d. 24

Have the student do the assignment for Day 16 after completing the day's lessons.

**Day 17**

In today's lessons the student learns to apply strategies to determine sums and differences of two-digit numbers and to apply estimation and mental strategies to addition and subtraction problems.

**Day 17: Lesson 1****Answers**

1. a. 5      d. 3      g. 10      j. 100      m. 2      p. 11      s. 13  
     b. 22      e. 9      h. 9      k. 26      n. 4      q. 12      t. 88  
     c. 12      f. 96      i. 20      l. 35      o. 17      r. 63

2. a.  $55 - 39 = 16$

Jasper would pay 16 cents less for the toy on sale.

b.  $86 - 79 = 7$

Jasper has 7 more marbles than Elena.

c.  $74 - 6 = 68$

Elena has 68 cents more than Jasper.

**Day 17: Lesson 2**

Review the following rounding rules with the student:

- If the number in the ones place is five or more, round the number to the next higher ten.
- If the number in the ones place is four or less, round the number to the lower ten.

**Answers**

1. a. 50  
     b. 5  
     c.  $32 + 10 + 10 + 10 + 10 + 10 = 82$   
     d.  $82 - 1 = 81$   
     e.  $49 + 32 = 81$
2. a. 30  
     b. 3  
     c.  $59 + 10 + 10 + 10 = 89$   
     d.  $89 - 2 = 87$   
     e.  $28 + 59 = 87$

3. a.  $31 + 10 + 10 + 10 + 10 + 2$  c.  $71 + 2 = 73$   
 b. 31, 41, 51, 61, 71 d.  $31 + 42 = 73$
4. a.  $52 + 10 + 10 + 7$  c.  $72 + 7 = 79$   
 b. 52, 62, 72 d.  $52 + 27 = 79$
5. a.  $63 + 10 + 10 + 10 + 5$  c.  $93 + 5 = 98$   
 b. 63, 73, 83, 93 d.  $63 + 35 = 98$

### Day 17: Lesson 3

#### Answers

1. a. 20 c.  $26 + 3 = 29$   
 b.  $46 - 20 = 26$  d.  $46 - 17 = 29$
2. a. 50 c.  $31 + 2 = 33$   
 b.  $81 - 50 = 31$  d.  $81 - 48 = 33$
3. a.  $38 \xrightarrow{2} 40 \xrightarrow{10} 50 \xrightarrow{10} 60 \xrightarrow{10} 70 \xrightarrow{10} 80 \xrightarrow{5} 85$   
 b.  $2 + 10 + 10 + 10 + 10 + 5 = 47$   
 c.  $85 - 38 = 47$
4. a.  $47 \xrightarrow{3} 50 \xrightarrow{10} 60 \xrightarrow{10} 70 \xrightarrow{3} 73$   
 b.  $3 + 10 + 10 + 3 = 26$   
 c.  $73 - 47 = 26$

Have the student do the assignment for Day 17 after completing the day's lessons.

### Day 18

This day focuses on estimating addition and subtraction facts with two-digit numbers.

**Day 18: Lesson 1****Answers**

1. a. 30, 60  
b.  $30 + 60 = 90$   
c.  $27 + 62$  is about 90.
2. a. 50, 30  
b.  $50 + 30 = 80$   
c.  $49 + 31$  is about 80.
3. a. 20, 60  
b.  $20 + 60 = 80$   
c.  $18 + 63$  is about 80.
4. a. 30, 20  
b.  $30 + 20 = 50$   
c.  $33 + 19$  is about 50.
5. a. 80, 20  
b.  $80 + 20 = 100$   
c.  $77 + 19$  is about 100.
6. a. 50, 50  
b.  $50 + 50 = 100$   
c.  $51 + 48$  is about 100.

**Day 18: Lesson 2**

Play the estimation game with the student at the end of the lesson. Have the student discuss the estimation strategies he or she used as the game progresses.

**Answers**

1. a. 50, 100  
b. 5  
c.  $97 - 48$  is about 50.

2.
  - a. 35, 73
  - b. 40, 70
  - c. 40, 50, 60, 70
  - d. 3
  - e.  $73 - 35$  is about 30.
3.
  - a. 19, 58
  - b. 20, 60
  - c. 20, 30, 40, 50, 60
  - d. 4
  - e.  $58 - 19$  is about 40.
4.
  - a. 37, 66
  - b. 40, 70
  - c. 40, 50, 60, 70
  - d. 3
  - e.  $66 - 37$  is about 30.

If the student hasn't done any of the extension activities for Days 14 to 18, have the student do these now.

Have the student do the assignment for Day 18 after completing the day's lessons.

When the student finishes the activities on Day 18, direct him or her to the Student Survey and Student Checklist in the Assignment Booklet. The student may work on these alone, or with your help. Go over the responses and discuss them with the student. Give additional instruction as needed to any of the concepts the student has indicated he or she needs help with.

Ensure that you complete the Home Instructor's Evaluation Checklist and Home Instructor's Feedback forms for Days 10 to 18. The Home Instructor's Feedback is to give any information you think may be helpful for the teacher to know.

**Submit Assignment Booklet 3B for marking.**

# ASSIGNMENT BOOKLET 3B

Grade Two Mathematics

Module 3: Days 10–18

## Home Instructor's Comments and Questions

\_\_\_\_\_  
Home Instructor's Signature

## FOR SCHOOL USE ONLY

Assigned Teacher:  
\_\_\_\_\_

### Grading

Mathematics:  
\_\_\_\_\_

Neatness:  
\_\_\_\_\_

Date Assignment Booklet  
Received:  
\_\_\_\_\_

## FOR HOME INSTRUCTOR USE (if label is missing or incorrect)

Student File Number:  
\_\_\_\_\_

### Grading Scale

- A – Very Satisfactory
- B – Satisfactory
- C – Needs Attention
- D – Unsatisfactory

Apply Module Label Here

Name

Address

Postal Code

*Please verify that preprinted label is for  
correct course and module.*

## Teacher's Comments

\_\_\_\_\_  
Teacher's Signature

**Home Instructor: Keep this sheet when it is returned to you as a record of the student's progress.**

# INSTRUCTIONS FOR SENDING IN THIS DISTANCE LEARNING ASSIGNMENT BOOKLET

When you register for distance learning courses, you are expected to send in Assignment Booklets for corrections regularly. Try to send each Assignment Booklet as soon as you have completed it. Before sending your Assignment Booklet, please check the following:

- Are all the assignments completed? If not, explain why.
- Has your work been reread to be sure the spelling and details are correct?
- Is the record form filled out and the correct module label attached?

## MAILING

### 1. Postage Regulations

Do **not** enclose letters with Assignment Booklets.

**Send all letters in a separate envelope.**

### 2. Postage Rates

**Take your Assignment Booklet to the post office and have it weighed. Attach enough postage** and seal the envelope. Assignment Booklets will travel faster if correct postage is used and if they are in large envelopes that are no more than two centimetres thick.

## FAXING

1. Assignment Booklets may be faxed. Contact your teacher for the fax number.
2. All faxing costs are the responsibility of the sender.

## E-MAILING

Assignment Booklets may be e-mailed. Contact your teacher for the e-mail address.

**Module 3**

# **Having Fun Adding and Subtracting**

Assignment Booklet 3B



Grade Two Mathematics  
Module 3: Having Fun Adding and Subtracting  
Assignment Booklet 3B  
Learning Technologies Branch

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	✓
General Public	
Other	



You may find the following Internet sites useful:

- Alberta Learning, <http://www.learning.gov.ab.ca>
- Learning Technologies Branch, <http://www.learning.gov.ab.ca/lrb>
- Learning Resources Centre, <http://www.lrc.learning.gov.ab.ca>

The use of the Internet is optional. Exploring the electronic information superhighway can be educational and entertaining. However, be aware that these computer networks are not censored. Students may unintentionally or purposely find articles on the Internet that may be offensive or inappropriate. As well, the sources of information are not always cited and the content may not be accurate. Therefore, students may wish to confirm facts with a second source.

### ALL RIGHTS RESERVED

Copyright © 2001, the Crown in Right of Alberta, as represented by the Minister of Learning, Alberta Learning, 11160 Jasper Avenue, Edmonton, Alberta T5K 0L2. All rights reserved. Additional copies may be obtained from the Learning Resources Centre.

No part of this courseware may be reproduced in any form, including photocopying (unless otherwise indicated), without the written permission of Alberta Learning.

Every effort has been made both to provide proper acknowledgement of the original source and to comply with copyright law. If cases are identified where this effort has been unsuccessful, please notify Alberta Learning so that appropriate corrective action can be taken.

**IT IS STRICTLY PROHIBITED TO COPY ANY PART OF THESE MATERIALS UNDER THE TERMS OF A LICENCE FROM A COLLECTIVE OR A LICENSING BODY.**

1. Use the number line to add and subtract.



a.  $14 - 5 =$

g.  $16 - 9 =$

b.  $18 - 2 =$

h.  $17 - 14 =$

c.  $12 + 6 =$

i.  $20 - 7 =$

d.  $16 + 4 =$

j.  $13 + 6 =$

e.  $13 - 4 =$

k.  $19 - 11 =$

f.  $8 + 9 =$

l.  $15 + 3 =$

2. Show how to add using tens. An example has been done for you.

$$8 + 5 = \boxed{13}$$

$$\underline{10 + 3}$$

$$\text{a. } 9 + 7 = \boxed{\phantom{00}}$$

\_\_\_\_\_

$$\text{b. } 8 + 3 = \boxed{\phantom{00}}$$

\_\_\_\_\_

$$\text{c. } 5 + 9 = \boxed{\phantom{00}}$$

\_\_\_\_\_

$$\text{d. } 6 + 9 = \boxed{\phantom{00}}$$

\_\_\_\_\_

$$\text{e. } 9 + 2 = \boxed{\phantom{00}}$$

\_\_\_\_\_

3. Subtract by counting on.

a.  $17 - 15 =$

b.  $8 - 5 =$

c.  $18 - 15 =$

d.  $12 - 9 =$

e.  $13 - 11 =$

f.  $20 - 18 =$

4. Subtract by counting back.

a.  $16 - 3 =$

b.  $15 - 2 =$

c.  $14 - 1 =$

d.  $20 - 2 =$

e.  $17 - 3 =$

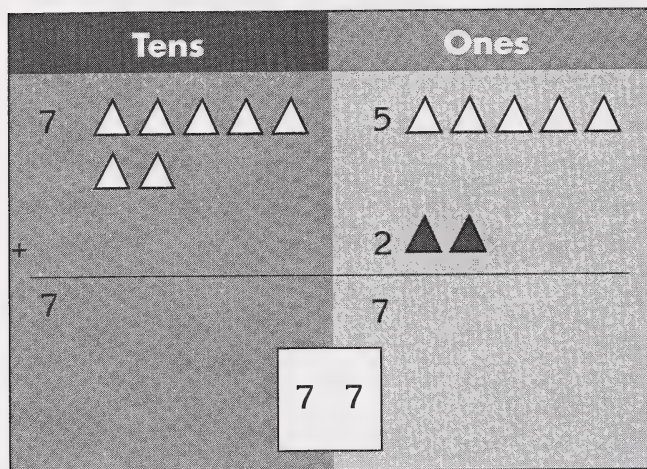
f.  $13 - 2 =$

g.  $11 - 1 =$

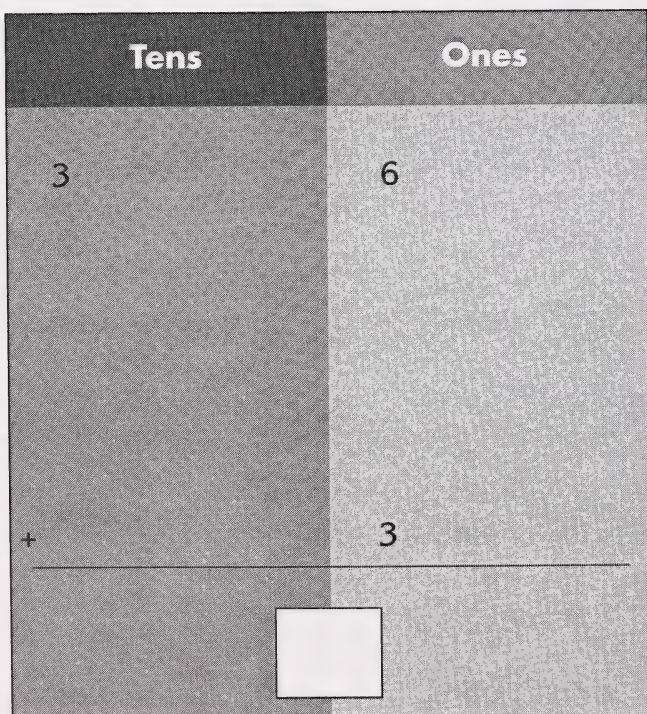
h.  $12 - 2 =$

i.  $19 - 3 =$

1. Draw a picture for each box and add or subtract the numbers. Watch the signs!  
The first one is done for you.



a.



b.

Tens	Ones
8	2
+	7
<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;"></div>	

c.

Tens	Ones
8	7
-	5
<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;"></div>	

d.

Tens	Ones
6	4
—	2
<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;"></div>	

e.

Tens	Ones
1	6
—	3
<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;"></div>	

2. Add.

$$\begin{array}{r} \text{a. } 50 \\ +9 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 77 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{g. } 96 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{j. } 85 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 78 \\ +1 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 57 \\ +2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{h. } 45 \\ +4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{k. } 62 \\ +7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 63 \\ +5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{f. } 92 \\ +8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{i. } 36 \\ +3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{l. } 41 \\ +6 \\ \hline \end{array}$$

3. Subtract.

$$\begin{array}{r} \text{a. } 83 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 93 \\ -2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{g. } 74 \\ -3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{j. } 36 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 49 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 38 \\ -7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{h. } 57 \\ -5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{k. } 29 \\ -6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 16 \\ -4 \\ \hline \end{array}$$

$$\begin{array}{r} \text{f. } 22 \\ -1 \\ \hline \end{array}$$

$$\begin{array}{r} \text{i. } 68 \\ -8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{l. } 47 \\ -6 \\ \hline \end{array}$$

1. Add.

$$\begin{array}{r} \text{a. } 70 \\ +26 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 83 \\ +14 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 65 \\ +34 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 46 \\ +52 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 39 \\ +60 \\ \hline \end{array}$$

$$\begin{array}{r} \text{f. } 54 \\ +43 \\ \hline \end{array}$$

2. Subtract.

$$\begin{array}{r} \text{a. } 67 \\ -33 \\ \hline \end{array}$$

$$\begin{array}{r} \text{c. } 98 \\ -67 \\ \hline \end{array}$$

$$\begin{array}{r} \text{e. } 73 \\ -20 \\ \hline \end{array}$$

$$\begin{array}{r} \text{b. } 88 \\ -76 \\ \hline \end{array}$$

$$\begin{array}{r} \text{d. } 19 \\ -13 \\ \hline \end{array}$$

$$\begin{array}{r} \text{f. } 36 \\ -24 \\ \hline \end{array}$$

Solve the problems.

3. Mandy has 52 pictures in her album. Her brother has 37 pictures in his album.  
How many pictures do they have in total?

a. Write the number sentence. \_\_\_\_\_

b. Mandy and her brother have  pictures in total.

4. Elena has 67 cents in her piggybank. That is 26 cents more than Jasper has in his piggybank. How much money does Jasper have in his piggybank?

a. Write the number sentence. \_\_\_\_\_

b. Jasper has  cents in his piggybank.

Solve these problems. Draw pictures to help you. Write the number sentence, including the addition or subtraction sign, and answer for each one.

1. Jasper watched a video that was 54 minutes long. He then watched a video that was 38 minutes long. How many minutes did Jasper watch videos in all?

a.    =

b. Jasper watched videos for  minutes.

2. Elena had 65 cents. She spent 48 cents on candy. How much money did she have left?

a.    =

b. Elena had  cents left.

3. There were 95 people at the concert. 37 people left early. How many people were left at the concert?

a.    =

- b. There were  people left at the concert.

4. Elena's friend Carla has 42 toy cars. Elena has 19 more toy cars than Carla. How many toy cars does Elena have?

a.    =

- b. Elena has  toy cars.

5. There were 18 horses in the stable and 42 horses in the field. How many more horses were in the field?

a.    =

- b. There were  more horses in the field.

6. Nadine has 29 green blocks and 57 purple blocks. How many blocks does she have altogether?

a.    =

- b. Nadine has  blocks altogether.

$$47 + 19$$

Luca does his arithmetic by imagining that he should add 10, then another 10, and then take one away, as in the following example.

$$47 + 10 + 10 - 1$$

1. a. Explain why Luca must subtract 1.

---



---



---

- b. What is the sum?

2. Fill in the blanks as Luca does this problem.

$$53 - 28$$

For this problem, Luca rounds 28 to the nearest 10.

- a. 28 rounded to the nearest 10 =

- c. Then he would add 2.

- b. Next Luca would subtract.

 +  = 

$$53 -$$

 = 

d.  $53 - 28 =$

3. Use any method to solve these. Show your work.

a.  $28 + 37 =$

b.  $99 - 56 =$

4. Solve the problem below and show how you got your answer.

Su Mai skipped rope for 43 minutes. Her friend Joey skipped rope for 39 minutes. How long did they skip altogether?

a. Write the number sentence, including the addition and subtraction sign.

			=	
--	--	--	---	--

b.

c. Together Su Mai and Joey skipped for 

--

 minutes.

5. Estimate to get the answer. Show your work.

a.  $49 + 33$  \_\_\_\_\_ = about

--

b.  $84 - 26$  \_\_\_\_\_ = about

--

c.  $28 + 13$  \_\_\_\_\_ = about

d.  $77 - 37$  \_\_\_\_\_ = about

6. Estimate the answer for this problem.

Millie's mother gave her 85¢ to buy some bread. The bread costs 63¢. About how much money would Millie have left after she bought the bread?

Show your work.

a. Write the number sentence.

<input type="text"/>	<input type="text"/>	<input type="text"/>	= about	<input type="text"/>
----------------------	----------------------	----------------------	---------	----------------------

b.

c. Millie will have about

left.

## **Student Survey**

### **Days 10 to 18**

Think about what you have learned about addition and subtraction in Days 10 to 18. Then answer these questions.

What did you find easy about Days 10 to 18?

---

---

---

---

---

---

---

List **three** things you learned about adding and subtracting in Days 10 to 18.

---

---

---

---

---

---

---

Is there something about adding and subtracting you would like to know more about?

---

---

---

---

---

---

Is there something you still need help with?

---

---

---

---

---

---

# **Student Checklist**

**Days 10 to 18**

I know how to . . .	Put a check mark beside the things you can do.
1. add and subtract two-digit numbers in different ways	
2. use different ways of estimating and doing math in my head to add and subtract	

# **Home Instructor's Evaluation Checklist**

**Days 10 to 18**

Specific Outcomes/ Concepts Learned  The student . . .	Has the student mastered the concept (yes or no)?
1. applies and explains multiple strategies to determine sums and differences on two-digit numbers, with and without regrouping	
2. applies a variety of estimation and mental mathematics strategies to addition and subtraction problems	

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.